CLAIMS

What is claimed is:

1.   An m-commerce system, comprising:

a data input component that receives item data representative of an article of commerce;

a coordination component that presents the article of commerce to a vendor for bid;

a location-awareness component that tracks the location of the data input component; and

a payment component that facilitates payment of the article of commerce.

2.   The system of claim 1, the data input component is a wireless portable terminal.

3.   The system of claim 1, the data input component uploads a shopping list to the coordination component, which coordination component seeks the bid for transacting the article of commerce.

4.   The system of claim 1, the data input component downloads item information from at least one of an appliance and a computer.

5.   The system of claim 1, the data input component is in continuous communication with the coordination component.

6.   The system of claim 1, the data input component communicates information using a virtual private network.

7.   The system of claim 1, a user of the data input component specifies a price range for a list of the articles of commerce, in response to which the coordination component seeks one or more of the bids to transact the list.

8. The system of claim 1, the data input component locates the article of commerce via RF backscattering.

9. The system of claim 1, the data input component facilitates receiving the item data by at least one of manual input, a dataform scanning system, an image capture system, an audio input system, a magnetic reading assembly, and an RF transponder reading assembly.

10. The system of claim 1, the location awareness component includes at least one of a GPS system, a general packet radio services network, and a RTLS architecture.

11. The system of claim 1, the coordination component facilitates communication of awareness data to both the data input component and a vendor.

12. The system of claim 11, the awareness data communicated to the data input component provides at least one of notification that the vendor is located nearby, and a name and/or an address of the vendor.

13. The system of claim 11, the awareness data communicated to the vendor provides at least one of identification of the user of the data input component and notification that the data input component is located nearby.

14. The system of claim 11, the awareness data facilitates pushing marketing information to the user of the data input component, which marketing information is targeted to the user.

15. The system of claim 1, the coordination component is disposed at least one of remotely on a global communication network and a local backoffice network.

16.   The system of claim 1, the coordination component coordinates inter-component functions between the data input component, the location awareness component, and the secure payment component.

17.   The system of claim 1, the secure payment component provides secure communication using at least one of a biometric, radio frequency identification (RFID) data, and an article-of-commerce dataform.

18.   The system of claim 1, the secure payment system distinguishes selection of a first article of commerce from a second article of commerce by processing both RFID data and dataform data of the first article of commerce.

19.   The system of claim 1, the secure payment component facilitates secure communication of item data via a secure key cryptographic engine.

20.   The system of claim 19, the engine receives as an input at least one of a manufacturer's key, a retailer's key, a unique item ID, and a locate command.

21.   The system of claim 19, the engine outputs at least one of a product lookup code and a set/reset password.

22.   The system of claim 1, the data input component outputs at least one of a map and location information that indicates the location of the article of commerce in a store.

23.   The system of claim 1, the data input component receives via the coordination component, item information associated with the article of commerce.

24.   The system of claim 1, the coordination component retrieves item information associated with the article of commerce from a vendor data resource, and downloads the information to the data input component for presentation to the user.

25.   The system of claim 1, the coordination component manages a transaction between a user of the data input component and a vendor selected to provide the article of commerce.

26.   The system of claim 1, the security component facilitates at least one of deactivation and activation of an RFID tag associated with the article of commerce when the data input component reads RFID tag data.

27.   The system of claim 1, the secure payment component authenticates the data input component to a store network.

28.   The system of claim 1, the location awareness component tracks the data input component in a wide are network and a local area network.

29.   The system of claim 1, the secure payment component utilizes electronic article surveillance (EAS) technology with bi-stable and resettable EAS data in an RFID tag.

30.   The system of claim 1, the location awareness component automatically updates a vehicle location tracking system to present a location of the vendor offering the bid.

31.   The system of claim 1, the location awareness component automatically updates the data input component with store information of a store as the data input component passes within range of a compatible store communication system.

32.   The system of claim 31, the data input component automatically notifies a user that the article of commerce is present in the store.

33. The system of claim 31, the data input component automatically notifies a user of a location of the article of commerce in the store.

34. The system of claim 1, the location awareness component facilitating synchronization of data of the data input component with a second data input component over a wireless personal data network.

35. The system of claim 1, the coordination component downloads multimedia content related to the article of commerce to the data input component in response to the item data being received.

36. The system of claim 1, the data input component transmits a unique password to a tag of the article of commerce to facilitate payment for that article of commerce.

37. The system of claim 36, the tag is an RFID tag that compares the unique password with a password of the RFID tag.

38. The system of claim 36, the tag is at least one of received programmed with the password and programmed with the password at a time of source marking.

39. The system of claim 1, the secure payment system includes a tag communication process that is prioritized according to a bandwidth provisioning architecture.

40. The system of claim 1, the data input component is one of a cellular telephone and a connected person data assistant.

41.   An m-commerce system, comprising:

an m-commerce device that receives item data representative of an item;

a remote portal agent disposed in wireless communication with the m-commerce device to receive the item data and seek a bid for transacting sale of the item; and

a location-awareness system that tracks a location of the device.

42.   The system of claim 41, the device automatically uploads the item data to the remote portal agent, in response to which the remote portal agent downloads to the device for presentation item information related to the item.

43.   The system of claim 41, the device communicates information in a store using a virtual private network.

44.   The system of claim 41, the remote portal agent is disposed on a global communication network, and seeks an online vendor to transact all or part of a shopping list of the items.

45.   The system of claim 41, the device locates the item in a store utilizing an RFID-based ranging and direction-finding technology.

46.   The system of claim 41, the device receives the item data by at least one of manual input, a dataform scanning system, an image capture system, an audio input system, a magnetic reading assembly, and an RF transponder reading assembly.

47.   The system of claim 41, further comprising a secure payment component that uses a biometric to authenticate the device to a store network.

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48.   The system of claim 41, the remote portal agent facilitates communication of awareness data to both the device and a vendor, which awareness data provides at least one of notification that the vendor is located nearby, identity information of the vendor, identity of a user of the device, and notification to the user that the device is located nearby.

49.   The system of claim 41, the remote portal agent facilitates communication of awareness data to both a user of the device and a vendor, the awareness data facilitates pushing marketing information to the device in accordance with user preference information and previous shopping habits.

50.   The system of claim 41, the device registers and authenticates with a store network, which facilitates establishment of a virtual private network connection between the store network and the device.

51.   The system of claim 41, the device is automatically authenticated to a store system *via* embedded tag information before the device connects to a store network.

52.   The system of claim 41, the location awareness system only notifies a device user of a vendor that has the item at least one of in stock and in the requested quantity.

53.   The system of claim 41, in response to successful login and authentication of the device, the item data is synchronized with a store system to output to the device item information that includes at least one of item location, quantity, and price.

54.   The system of claim 41, further comprising a secure payment system that facilitates secure communication of item data via a secure key cryptographic engine.

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55. The system of claim 54, the engine receives as an input at least one of a manufacturer's key, a retailer's key, a unique item ID, and a locate command, and outputs a product lookup code and an RFID tag set/reset password.

56. The system of claim 55, the RFID tag set password is different from the RFID reset password.

57. The system of claim 54, the engine facilitates associating a unique ID with a customer account.

58. The system of claim 41, where the item is scanned and returned within a predetermined period of time, movement of the item is tracked and energy from an unregistered device is identified.

60. The system of claim 41, further comprising a secure payment system that utilizes electronic article surveillance (EAS) technology with bi-stable and resettable EAS data in an RFID tag of the item.

61. A method of facilitating an m-commerce transaction, comprising:
   receiving via an m-commerce device item data representative of an item of commerce;
   communicating the item data to a remote personal agent;
   requesting at least one bid for the item data; and
   transacting the bid.

62. The method of claim 61, further comprising automatically tracking the location of the m-commerce device using at least one of GPS, GPRS, and RTLS.

63. The method of claim 61, further comprising securing payment of the bid via a remote payment agent.

64.   The method of claim 61, the item data communicated to the remote personal agent according to an always-connected architecture.

65.   The method of claim 61, further comprising interrogating the item of commerce to receive the item data using an RFID technology, the RFID technology also including an EAS password.

66.   A method of facilitating an m-commerce transaction, comprising:

receiving from an appliance item data representative of an item of commerce;

communicating the item data from a portable communication device to a remote personal agent disposed on a communication network;

requesting via the remote personal agent a plurality of offers to sell the article of commerce;

selecting at least one of the plurality of offers via the portable communication device; and

transacting purchase of the article of commerce based on the at least one offer.

67.   The method of claim 66, the item data received wirelessly from the appliance into the portable communication device.

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68. A method of facilitating an m-commerce transaction, comprising:

receiving item data representative of an item of commerce into a portable communications device of a user;

communicating the item data from the portable communication device to a remote personal agent disposed on a communication network;

requesting via the remote personal agent a plurality of offers to sell the article of commerce;

selecting at least one vendor associated with one or more the plurality of offers via the portable communication device;

guiding the user to the location of the vendor using a lower resolution location system;

guiding the user to the article of commerce at the location of the vendor using a higher resolution location system; and

transacting purchase of the article of commerce based on the at least one offer.

69. The method of claim 68, the lower resolution location system is a satellite-based location system, and the higher resolution system is an in-store location system.

70. The method of claim 68, the purchase is transacted using the portable communication device.

71. The method of claim 68, the user is guided to both the vendor location and the article of commerce via the portable communication device.

72. The method of claim 68, further comprising synchronizing the portable communication device with at least one of an appliance and a computer via a wireless network to receive the item data.

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73. A portable terminal device that facilitates mobile commerce, comprising:

a data input component that receives item data representative of an article of commerce;

a security component that provides secure communication of the item data;

a location-awareness component that facilitates determining a location of the device; and

a communication component that communicates at least the item data to a remote location.

74. The device of claim 73, the location-awareness component facilitates locating the device and/or an item by using at least one of a global positioning system (GPS) architecture, radio frequency identification technology (RFID), and a real-time location system (RTLS).

75. The device of claim 73, the data input component facilitates receiving the item data by at least one of manual input, a dataform scanning system, an image capture system, an audio input system, a magnetic reading assembly, and an RF transponder reading assembly.

76. The device of claim 73, the security component provides secure communication using at least one of biometrics, RFID, and a dataform.

77. The device of claim 73, the security component provides secure communication by combining the use of RFID and a dataform.

78. A personal data assistant according to the device of claim 73.

79. A telephony device according to the device of claim 73.

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80.   The device of claim 73, the communication component maintains the device in an always-connected status.

81.   The device of claim 73, the communication component maintains the device in an always-connected status with a remote personal agent.

82.   The device of claim 73, the communication component facilitates the synchronization of item data from the device to a remote personal agent.

83.   The device of claim 82, the remote personal agent disposed on a global communication network.

84.   The device of claim 73, the data input component receives a plurality of item data related to a corresponding plurality of items, which items comprise a shopping list that is uploaded wirelessly to at least one of a remote personal agent and a store backoffice system.

85.   The device of claim 73, the security component facilitates secure communication of item data via a secure key cryptographic engine.

86.   The device of claim 85, the engine receiving as an input at least one of a manufacturer's key, a retailer's key, a unique item ID, and a locate command.

87.   The device of claim 85, the engine outputs at least one of a product lookup code and a set/reset password.

88.   The device of claim 73 further comprising a display component for displaying a map that presents the location of an item in a store.

89.   The device of claim 73, the location-awareness component provides the location of a commercial subscriber that seeks to transact a sale of the article of commerce.

90.   The device of claim 89, the subscriber location is provided to the device when the device is within a geographical proximity of the location of the commercial subscriber.

91.   The device of claim 73, the article of commerce includes an RFID tag that is deactivated when the device reads the tag thereof for a purchase transaction.

92.   The device of claim 73, the article of commerce includes an RFID tag that is activated when the article of commerce is returned to a store.

93.   The device of claim 73, the data input component generates a shopping list of items for purchase, which list is uploaded wirelessly to a remote personal agent so that one or more commercial subscribers may bid on transacting at least one item of the shopping list.

94.   The device of claim 73, the communication component facilitates synchronizing the device with another device on a personal area network.

95.   The device of claim 73, the security component automatically authenticates the device to a network.

96.   The device of claim 73 the data input component receives item data, in response to which the device at least one of connects to a web page, retrieves item information, and transacts the item for purchase.

97. The device of claim 73, further comprising a multimedia component that facilitates presenting item content data of the article of commerce to a user of the device in response to receiving the item data.

98. The device of claim 97, the item content data including audio data, video data, text data, and image data.

99. An m-commerce device, comprising:

a data input component that facilitates receiving item data representative of an article of commerce in a store;

an authentication component that facilitates authentication of the device when the device enters a store;

a security engine that provides secure wireless communication of the item data of an item tag when shopping in the store;

a location-awareness component that facilitates determining a location of the article of commerce in the store; and

a communication component that communicates at least the item data to a remote location to purchase the article of commerce.

100. The device of claim 99, the authentication component receives user biometric data via the input component.

101. The device of claim 99, the remote location is a point-of-sale terminal located in the store.

102. The device of claim 99, the location-awareness component facilitates locating the article of commerce using backscatter radio frequency identification technology (RFID) tags, and a real-time location system (RTLS).

103. The device of claim 99, the data input component facilitates receiving the item data by at least one of manual input, a dataform scanning system, an image capture system, an audio input system, a magnetic reading assembly, and an RF transponder reading assembly.

104. The device of claim 99, further comprising a secure payment module that that authenticates with an operating system of the device.

105. The device of claim 99, the data input component receives a plurality of item data related to a corresponding plurality of articles of commerce, which articles of commerce comprise a shopping list that is uploaded wirelessly to a backoffice system of the store.

106. The device of claim 99, the security engine receives as an input at least one of a manufacturer's key, a retailer's key, a unique item ID, and a locate command, and outputs at least one of a product lookup code and a set/reset password.

107. The device of claim 99, further comprising a display component for displaying a map that presents the location of the article of commerce in the store, and a location of a commercial subscriber that seeks to sell the article of commerce.

108. The device of claim 99, the article of commerce includes an RFID tag that is deactivated when the device reads the tag for a purchase transaction, and activated when the article of commerce is returned to the store.

109. The device of claim 99, the communication component facilitates synchronizing the device with another device on a wireless personal area network.

110. The device of claim 99, further comprising a multimedia component that facilitates presenting item content data of the article of commerce to a user of the device in response to the device receiving the item data.

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111. The device of claim 110, the item content data is received from a remote location that is a a website and/or a store backoffice system, which item content data includes audio data, video data, text data, and image data.